



REPORT

MICHIGAN FOOD WASTE POLICY GAP ANALYSIS AND INVENTORY



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Glossary of Terms

Food rescue. This term refers to donation or recovery of surplus food for feeding hungry people.

Food waste reduction. This term encompasses all tiers of the food recovery hierarchy: prevention, donation, animal feed, composting, and anaerobic digestion.

Source-separated organics (SSO). This term references organic material separated for processing and may encompass food scraps as well as yard waste.

GAP ANALYSIS COLOR CODING

No Policy
Weak Policy
Moderate Policy
Strong Policy

Introduction

This report comprises a gap analysis and detailed inventory of food waste-related policies in Michigan. Whereas the inventory provides an overview of existing state policies, the gap analysis identifies policy opportunities for furthering food waste reduction. Categories were chosen to represent areas across the food recovery hierarchy and include: organics disposal bans and recycling laws; date labeling; food donation liability protections; tax incentives for food rescue; organics processing infrastructure permitting; food safety policies for share tables; food systems plans, goals, and targets; plans targeting solid waste; climate action goals; and grants and incentive programs related to food waste reduction. The goal of this report is to equip NRDC Food Matters city partners with a comprehensive overview of their state’s respective policy landscape and how it helps and/or hinders efforts to reduce food waste.

The gap analysis can be read as a summary digest of the more detailed policy inventory. This section serves to highlight particularly strong policies that can be leveraged to further a city’s food waste reduction goals, as well as advocacy opportunities where policies are weak or non-existent. The inventory provides a more comprehensive overview of any policies, executive orders, goals, targets, or programs that exist across the ten covered categories. Users may choose to read the gap analysis to gain a basic understanding of their state’s policy landscape and then reference the inventory for detailed information.

Policy Gap Analysis Approach and Applications

To provide a consistent and objective analysis, policy categories were assessed using a rubric that defines “No Policy,” “Weak Policy,” “Moderate Policy,” and “Strong Policy” for each category. Below is the rationale and definition for each tier of the rubric for the ten policy categories, as well as examples of policies in practice for select categories. For full rubric, see Food Waste Reduction Policy Gap Analysis Rubric.

ORGANICS DISPOSAL BANS AND RECYCLING LAWS

Organics disposal bans and mandatory recycling laws are an effective means of achieving food waste reduction, including via prevention and other strategies across the hierarchy. By limiting the amount of organic waste that entities can dispose of in landfills or incinerators, organics disposal bans and waste recycling laws compel food waste generators to explore more sustainable practices like waste prevention, donation, composting, and anaerobic digestion (AD). A Strong Policy applies to all commercial generators (and possibly individuals at the household level) and is actively enforced. A Moderate Policy is similarly enforced but imposed only on select commercial generators, and Weak Policies are ones that provide several exemptions from the law’s applicability, such as exemptions based on distance from a processing facility or the cost of processing. It is quite common for states to start with a Weak Policy and gradually strengthen it as the marketplace evolves and impacted stakeholders are educated and gain the resources to comply.

Policy in Action

While there are no states in the Great Lakes that have organics disposal bans or mandatory recycling laws, elsewhere they have received a lot of attention in recent years as an increasing number of states and localities have adopted this policy approach. In many cases, other actions were taken in the years leading up to the legislation or regulation that enabled it to get political and practical traction. For example, in Massachusetts, one of the first states to ban food waste, the state made incremental changes during the years ahead of the ban’s effective date, including:

- Modernizing the permitting structure for composting and AD facilities;
- Investing in infrastructure through grants and low-interest loan programs;
- Providing regulatory relief from other waste ban materials if supermarkets diverted food waste through an innovative partnership with the Massachusetts Food Association called the Supermarket Recycling Program Certification; and
- Developing RecyclingWorks in Massachusetts, a no-cost technical assistance program to help businesses comply.

New York State has taken similar steps by providing grants for infrastructure, supporting food donation networks, and establishing business assistance in advance of its legislation. New York is also an example of a state where a major city (New York City) enacted a waste ban ahead of the statewide law.

Bans and Beyond: Designing and Implementing Organic Waste Bans and Mandatory Organics Recycling Laws, a resource produced by the Harvard Food Law and Policy Clinic and the Center for EcoTechnology, provides further detail on these policies, including their development and structure, for cities and states that are considering this policy option.¹

DATE LABELING

Date labels affixed to food products are a major driver of food waste and an obstacle to food donation. There is currently no federal system regulating the use of date labels such as “sell by,” “best by,” and “use by” on foods. Instead, each state individually decides whether and how to regulate date labels. Manufacturers often have broad discretion over how the dates on foods are selected. These dates typically reflect quality and taste rather than safety, yet businesses, individuals, and even state regulators frequently misunderstand the dates and interpret them to be indicators of when food is no longer safe to eat.

Standardization of date labeling is a cost-effective solution to food waste. By educating consumers about the meaning of date labels on products sold within the state and eliminating bans on the donation or sale of past-date foods, states can make date labels comprehensible to consumers and avoid the systematized waste of safe and wholesome foods. A Strong Policy requires that manufacturers or retailers who choose to affix date labels to foods use one of two prescribed date labels, a quality label or a safety label. In addition, a Strong Policy expressly permits the donation of food after the quality date. A Moderate Policy requires date labels for certain foods, but does not prohibit or limit the sale or donation of food after its label date. A Weak Policy—and potentially a detrimental one—requires date labels for certain foods and prohibits or limits the sale or donation of food after its label date. Federal guidance recommends the use of the phrase “BEST If Used By” to indicate a food’s quality. Federal legislative proposals as well as industry efforts have recommended the same, and further recommend the phrase “USE By” to indicate safety concerns. States should align their standards with these efforts.

Policy in Action

States in the Great Lakes region have not established dual date labeling systems that clearly distinguish between quality and safety. Many states in the region have conflicting or unnecessarily restrictive date labeling requirements. With a lack of clear guidelines, food manufacturers and processors have largely created their own labeling schemes. In some cases, decisions on how these dates are determined can be driven by business interests, and the labels often have a wide range of wording that increases confusion. In addition, even where state date labeling regulations exist, they often are not based on science-backed food safety concerns. As a result, consumers or businesses often dispose of food when it reaches the label date, even though it may be safe to eat. Thus, date labels are an important part of any policy strategy to prevent food waste, and one that cities can encourage states to pursue. Until federal legislation or regulations standardizing date labels are adopted, states can remove problematic components of their own date labeling policies using guidelines recommended in this analysis, and even help pave the way for federal standardization.

FOOD DONATION LIABILITY PROTECTIONS

Restaurants, retailers, and other food businesses are often hesitant to donate food because they fear being held liable for harm caused by the donated food. While the federal Bill Emerson Good Samaritan Food Donation Act provides robust liability protection for both food donors and food rescue organizations, state liability protections can strengthen this and encourage food donation by further reducing liability risks for those participating in food rescue. A Strong Policy provides liability protection for donations directly to individuals, allowing restaurants and food service organizations to donate small amounts of food that may be cost-prohibitive to transport or store; it also offers protection for donations supplied to the final consumer for a small fee, thereby extending protection to innovative food rescue models like social supermarkets. A Moderate Policy is broader than federal-level protections and may provide protections for donations directly to individuals or donations made for a small fee. A Weak Policy provides protections that are no broader than federal-level ones, or only protects one party, such as the donor or food rescue organization.

Tools to Support Policy

Legal fact sheets or guidance documents can serve as a beneficial tool in communicating legal protections and considerations for potential donors. These documents can relay legal language using easily understood terms that help clarify requirements for protection to apply and alleviate concerns related to donation. The Harvard Law School Food Law and Policy Clinic has created many of these state-specific food donation fact sheets (including on the topic of liability protection for food donation) and a number of other useful documents; these can be found in the organization's online resource library.

TAX INCENTIVES FOR FOOD RESCUE

Donating food can be expensive, because it requires money to harvest, package, store, and transport food that would otherwise be discarded. Tax credits or deductions can help offset those expenses and offer an economic incentive for food donations. A federal tax incentive exists, but certain businesses struggle to utilize it. State-level tax incentives for food donation can help support the agricultural economy and food producers, strengthen ties between local businesses and consumers, reduce the amount of wasted food, and improve the healthy options available to state residents who use emergency food outlets. A Strong Policy is one in which tax deductions or credits fully offset the costs associated with food donation, including transportation. A Moderate Policy provides a tax incentive for food donation, but the incentive does not fully offset the associated costs.

Policy in Action

States and cities may issue tax incentives that help promote food rescue. None of the states in the Great Lakes have tax incentives for food rescue, and none of the states or jurisdictions reviewed in the Mid-Atlantic or Southeast regions have a Strong Policy designation in this category. However, Philadelphia provides an example of a policy enacted at the local level that helps to incentivize food donation. The city implemented a sustainable business tax incentive that allows businesses who meet certain sustainability criteria—including participating in food donation—to receive a tax credit of up to \$4,000 on the Business Income & Receipts Tax (BIRT). As another example, Maryland, a state with a Moderate Policy in this category, offers a tax credit only for food donation by qualifying farms and farm businesses. These businesses can claim up to 50 percent of the value of the donation for conventional products, and up to 75 percent of the value of certified organic produce donations to charitable organizations.

ORGANICS PROCESSING INFRASTRUCTURE PERMITTING

Strong processing infrastructure policies actively facilitate the development and permitting of organic waste processing facilities—including both composting and anaerobic digestion facilities and small-scale composting operations—and are in sync with current best practices for organics processing. A Strong Policy includes a regulatory tier for source-separated organics (SSO) and provides opportunities for market development. Further, a Strong Policy minimizes barriers to entry, is aligned with best management practices for composting SSO, and offers a separate permitting process for anaerobic digestion of SSO. A Moderate Policy similarly offers a dedicated regulatory tier for SSO and considerations for market development, but it may have the same composting requirements for SSO as for mixed solid waste, may negatively impact economic viability by limiting the quantity or site acreage, or may include vague language for handling SSO through anaerobic digestion. A Weak Policy still includes a regulatory tier for SSO, but two of the drawbacks noted above (e.g., limitations on site acreage) are present. No Policy refers to locales with no processing tier for SSO, no acknowledgement of anaerobic digestion of SSO, and no exemption tier for small quantities of SSO.

A commitment to recycled organics market development is another mechanism to bolster organics processing infrastructure. Examples of market development mechanisms include procurement or bidding mandates that require developers to use compost products or recycled organic materials in their development projects.

States with strong policies for diversion to animal feed do not regulate feeding food scraps to animals or have minimal restrictions on such activity; they may also offer education and guidance on relevant laws and regulations and/or encourage collaboration with local farms.

An Evolution of Infrastructure Permitting

Permitting for organics processing infrastructure has evolved over the decades in response to the unique characteristics of different feedstocks, including biosolids, leaf and yard waste, and now, increasingly, food waste. In the 1980s, the U.S. Environmental Protection Agency (EPA) promulgated regulations codified at 40 CFR 503 that established pathogen and vector attraction reduction requirements and pollutant limits for biosolids recycling, including composting. Those requirements are included in most state solid waste regulations for composting, such as PFRP, the process to further reduce pathogens (e.g., maintaining temperature of 55 °C for three days in aerated static piles or 15 consecutive days in windrows). Later in the 1980s and into the 1990s, about two dozen states passed bans on landfill disposal of leaves, grass, and/or brush. This was in response to a perceived shortfall in landfill capacity and led to the creation of composting facilities specifically for yard trimmings in many states. To facilitate the development of yard trimmings processing capacity, states created a “permit by rule” approach (essentially a notification) to facility permitting or established an exemption. Permit-by-rule was an early example of a tiered permitting approach to composting regulations.

Interest in composting of source-separated food scraps grew throughout the 1990s. On-site composting of food scraps, for example, was enabled by in-vessel systems on the market. State solid waste agencies, recognizing that on-site food scrap composting poses minimal threats to public health and the environment, began adopting on-site composting exemptions. Some states also created exemptions for composting food scraps on farms during this time. In some instances, farms were not allowed to sell the compost but instead were required to use it all for their own agricultural operations.

Permit-by-rule, on-site exemptions, and on-farm composting exemptions are the foundation of a tiered approach to regulating composting facilities that process source-separated organic waste streams, including food scraps. Site and operational requirements for processing SSO tend to be less restrictive at smaller volumes and then become more restrictive, e.g., more stringent storm water management and pad requirements, as the quantities of feedstock increase. Tiered approaches reduce barriers to entry for SSO composting, which is why this regulatory approach was prioritized in this report’s policy rubric. As reflected in the rubric structure, it is generally acknowledged that a tiered approach to permitting facilitates development of food scrap processing facilities. This is especially the case for existing yard trimmings composting operations that can move from a permit-by-rule status to a registration or permitted status (depending on quantity of food scraps received) without significant financial hardship (in terms of permitting fees, site improvement costs, etc.). What typically changes are the operating procedures, such as requiring that food scraps be incorporated into the composting process soon after their arrival. PFRP temperature requirements must also be met, especially when meat, dairy, and shellfish are included in the food scraps stream.

To date, regulation of anaerobic digestion facilities receiving food scraps (codigestion) varies by state. In Pennsylvania, for example, the state solid waste agency has a permit for codigestion on dairy farms; however, oversight of codigestion at wastewater treatment plants is done by the water/wastewater division (and by the EPA in some cases, in terms of discharge permits). In Ohio, the state solid waste agency defers permitting of digesters taking food scraps to the air and water quality divisions. The organics processing permitting infrastructure inventories illustrate these variations among states.

Policies in the Great Lakes Region

The organics processing infrastructure permitting policy inventories for the four Great Lakes states covered in this report reveal a regulatory hodgepodge—from essentially no permitting oversight of food scrap composting in Michigan to a well-established, tiered regulatory approach in Ohio.

An official in the Solid Waste Section of the Michigan Department of Environment, Great Lakes, and Energy (MI EGLE) said new composting regulations that use a tiered approach to the permitting of composting facilities will be introduced in the legislature in 2021. The department also proposes to change the existing term for food waste (*garbage*) to *source-separated food waste*. Currently, MI EGLE does not have a permit for sites to accept source-separated food waste. Facilities processing less than 5,000 cubic yards per acre are required only to register with the state; facilities wanting to process more than that must show they have capacity and capability to compost a greater volume of material.

Illinois regulations accommodate food scrap composting, but the allowance (“up to 49 percent additives,” which include food waste) is in a Public Act rather than the solid waste regulation. The Illinois Environmental Protection Agency (IL EPA) is revising its regulations in 2021 to include food scrap composting permitting in its solid waste rule.

Ohio has had tiered regulation since its composting rules were promulgated in 1993. It revises the rules as necessary. For example, in 2012 the Ohio Environmental Protection Agency (OHEPA) added a 300-square-foot area-based (versus quantity-based) exemption for small-scale composting of yard trimmings and food scraps, such as at community gardens. Rule revisions made in 2018 increased that limit to 500 square feet, in large part because the agency observed that these sites were operated without causing public nuisances.

The Wisconsin Department of Natural Resources (WI DNR) exempts facilities from obtaining a compost license if they process less than 50 cubic yards of yard materials or food scraps at one time. All facilities handling matter that meets the state's definition of source-separated compostable materials and that are processing more than 50 cubic yards of it must obtain a composting "license" (permit). Food scraps are categorized as a source-separated material; sites that manage no more than 5,000 cubic yards source-separated compostable material on site at one time may operate under reduced regulatory requirements.

FOOD SAFETY POLICIES FOR SHARE TABLES

Share tables in schools can promote food rescue efforts and also teach children about food waste and rescue. While the U.S. Department of Agriculture (USDA) provides guidance on establishing share tables in schools, a Strong Policy at the state level goes above and beyond this guidance by encouraging share tables and developing state-specific guidelines or instructions about food safety as it relates to donation. A Moderate Policy allows share tables but provides only limited guidance. A Weak Policy also allows share tables but provides no guidance or offers more restrictive rules and guidance than the federal government does.

From a broader food policy perspective, food donors and food rescue organizations must also comply with food safety regulations. These regulations often do not directly address food donation specifically and can be difficult to navigate for food donors and health inspectors alike. To facilitate increased food rescue, state and local actors can create better and more consistent food safety regulations, produce guidance on food safety regulations for food donation, and prepare health inspectors to serve as food donation advocates. While many of the states analyzed for this project have produced guidance on implementing share tables in schools, very few have promulgated clear, science-based food safety regulations for food donations or offered food safety guidance for food donation more broadly. Given this gap, an opportunity remains for policymakers and advocates at the state and local levels to push for the following changes: regulations that explicitly state what foods can be donated, state-wide uniformity among regulations that apply to donated foods, clarifying guidance on food safety for food donation to support potential food donors, and trainings for local health inspectors on safe food donation.

Policy in Action

Three of the four Great Lakes states analyzed here have established strong policies to provide guidance for share tables in schools. Notably, Wisconsin offers guidance on food rescue in schools as well as food safety requirements. In 2016 the state's Department of Public Instruction issued a letter encouraging efforts to reduce waste at school meals. Actions along these lines can also help to feed hungry people. Connecticut offers a cautionary tale of the importance of clear communication and coordinated efforts among stakeholders. In 2017, the Connecticut State Department of Education released a memorandum noting that the state's share table regulations limit their use to foods that are packaged or unpeeled and that do not require temperature control. This caused confusion among schools who thought the regulations could also apply to external donation—and thus felt compelled to dispose of foods like untouched apples and unopened cartons of milk. State agencies subsequently endorsed a guidance document that clarifies the distinction between share tables and donation to food rescue organizations, and the different regulations for each, and it has been made widely available to schools.

FOOD SYSTEMS PLANS, GOALS, AND TARGETS

Statewide food systems plans, where goals and targets are given the support of state infrastructure, will have a much broader impact than regional or local food systems plans. However, any food systems plan that actively considers food waste reduction and sets clear targets to reduce food loss and waste demonstrates a clear commitment to improving food systems. A Strong Policy designation indicates that there is a comprehensive statewide plan with a set of clear goals and targets that also incorporates food loss and waste reduction. A Moderate Policy features regional food systems plans or a state plan in which one of the following is true: There is limited support to achieve goals, there is a failure to coordinate with other regional plans, or there is little to no consideration of food waste reduction. Weak Policies are designated where there is a regional food systems plan that does not have broader state support and does not address food waste reduction.

Policy in Action

Illinois offers an example of a strong policy in this category, having developed a comprehensive statewide plan for managing both food and agriculture systems that takes food waste reduction into consideration. In the absence of state-level documents, many cities have also taken a leadership role in developing their food systems plans. Policies across the country, such as in Massachusetts, Rhode Island, and San Diego, have included very direct language about how reducing food waste is central to the success of the statewide food systems plan. Rhode Island's food strategy, *Relish Rhody*, supports a robust food system that also protects natural resources, promotes clean energy goals, and connects these goals to reducing food waste. To illustrate, one of the five integrated focus areas in Rhode Island's policy is "to minimize food waste & divert it from the waste stream."

PLANS TARGETING SOLID WASTE

Solid waste management plans set targets and a framework for achieving overall materials management and waste diversion goals. Plans that include food waste diversion demonstrate that a state actively considers the impact of food waste on materials management infrastructure, and the best ones are continuously updating their guidance to stay current. A Strong Policy features a current solid waste management plan, zero waste plan, or organics management plan that addresses food waste reduction and offers a strategy for reducing waste. A Moderate Policy highlights food waste as a diversion opportunity but has limitations or is out of date. States with a Weak Policy have plans that are more than a decade out of date and do not acknowledge the role of food waste reduction in diversion strategies.

Measuring Goals

States use a number of strategies to set goals and measure progress on food waste diversion, including analysis of recycling rates, waste reduction rates, or waste generation rates. Recycling rates compare the quantifiable amount of material generated in a territory with the amount of municipal solid waste disposed, but it can be challenging to accurately capture this data, and this approach does not account for waste reduction efforts. A waste reduction rate encompasses the information included in the recycling rate but adds consideration of waste reduction efforts. However, since it can be difficult to measure what is not created (as when food is not wasted), the calculation process can be complicated and the data provided can be less reliable than a recycling rate. A third strategy is to track the waste generation rate over time, either overall or per capita. In areas where waste handling facilities have finite capacity, this data point also helps state officials monitor infrastructure needs as they evolve.

Massachusetts is an example of a state that has evolved its goal-setting and data collection strategies over time, using each data point in different iterations of its solid waste master plan. Massachusetts arrived at using an overall waste generation rate to reduce staff labor required in monitoring goals and allow a focus on various materials reduction rates. As another example, in its *Beyond Waste* plan, New York took a per-capita waste generation rate approach, accounting for variations in population across the state.

CLIMATE ACTION GOALS

A climate action plan sets clear targets for addressing climate change and establishes clear pathways to meet those targets. With respect to policy vehicles, legislation ranks higher in this policy rubric because it demonstrates a statewide commitment to climate action, whereas executive orders can be revoked by later administrations. Even in the absence of explicit goals for food waste reduction, carbon reduction targets can be leveraged to justify and drive food waste reduction activities at the city and state level. Where state-level political support for climate action is lacking, cities can adopt their own plans and policies. These can incorporate the contribution that food waste reduction makes towards decreasing emissions while providing economic benefits.

Since food waste is a significant contributor to greenhouse gas emissions, a Strong Policy will incorporate a plan to reduce food waste and will identify action steps for specific departments to carry out the work outlined in the plan. A Moderate Policy features a plan that outlines climate action goals, along with supporting legislation or specific departments that have been tasked with action steps. A Weak Policy for a climate action goal is set by executive order with no legislative framework or enacted with limited legislative action and no framework to achieve goals.

GRANTS AND INCENTIVE PROGRAMS RELATED TO FOOD WASTE REDUCTION

State or local grant and incentive programs can be important catalysts for expanding food waste reduction activities across the hierarchy, from helping offset the costs of donation, to seeding startup food rescue organizations and supporting targeted infrastructure expansion, to providing technical assistance to marketplace stakeholders. A Strong Policy has a sustainable funding model to create grants and incentive programs that are explicitly aimed at food waste reduction. These programs also offer free technical assistance to support food waste reduction in an effort to lower the barriers to diversion. A Moderate Policy includes grants and funding for food waste reduction, but the funding may not be dedicated to this category or may be unsustainable, or technical assistance may not be offered. In states with a Weak Policy, grants to support food waste reduction are available, but more than one of the following is true: funding is not dedicated to this category, funding opportunities are not advertised or accessible, funding is unsustainable, or technical assistance is not provided.

Policy in Action

In addition to providing financial support, states and local entities are increasingly seeing the value and impact of educational programs and technical assistance for food waste generators. Several states provide technical assistance—tailored one-on-one support to an entity to implement food waste reduction strategies—which can lay the groundwork for a future waste ban or recycling mandate. In the absence of such legislation, a robust technical assistance program can still achieve meaningful results at all levels of the hierarchy. Complementary education and promotional campaigns allow broad outreach to constituents and can be an effective tool for raising awareness and spurring individual action. Every state and city has the opportunity to promote, and support constituents in, reducing food waste.

Austin, Texas, has implemented an ordinance that requires certain businesses to rescue surplus food and source-separate food scraps for processing separate from municipal solid waste. Each covered business must submit an annual diversion plan that gives an overview of the types of material that will be recovered and the handling strategy for each of these waste streams. To support enforcement efforts, city staff may inspect hauling and recycling contracts. The city also offers a Reduction or Reuse Credit, whereby businesses can offset performance standards for organics recycling through source reduction efforts. A Zero Waste Business Rebate of up to \$1,800 is also available to support businesses that are beginning or expanding zero waste initiatives, such as composting or recycling programs. Further, Austin Resource Recovery offers direct technical assistance to entities initiating organics diversion programs.

Establishing a framework for the state's highway department or other state agencies to use compost in construction projects is another incentive program that can be pursued to support compost markets. For example, Illinois's Compost-Amended Soil Construction Act requires state agencies using off-site soil for construction projects to bid for a compost-amended soil if a facility is located within 10 miles of the project. Not only does this provide a broader incentive for use of compost in state projects, but it also helps create an end market for finished compost, acknowledging the importance of compost sales on the sustainability of processing facilities.

Michigan Food Waste Policy Gap Analysis

Policy Category	Status	Policy Recommendations and Potential Advocacy Opportunities
Organics Disposal Bans and Recycling Laws	<p>No Policy</p> <p>Michigan enacted a disposal ban for yard trimmings in 1995 but has not enacted a food waste disposal ban, and there is no financial incentive structure to encourage food waste diversion.</p>	<ul style="list-style-type: none"> Enact an organic waste ban or mandatory organics recycling law for all commercial generators. Introduce a solid waste disposal tip fee that would help incentivize waste diversion while generating a revenue stream to fund food waste prevention and diversion programs. Cities or counties may be able to enact their own organic waste bans for food waste or establish incentive programs for food donation or waste diversion because they have the power to develop their own solid waste disposal plans. Incentive programs can come in the form of recognition, certification, or regulatory relief. <p>Note: Progress on the recommendations below, particularly in the areas of Liability Protection, Tax Incentives, Organics Processing Permitting, Food Systems Plans, and Solid Waste Management Plans can help make food waste reduction more common, which can lower barriers to implementing policies like a disposal ban.</p>
Date Labeling	<p>Weak Policy</p> <p>Michigan requires sell-by dates for milk and for packaged perishable food.² There is no differentiation between quality-based and safety-based dates and no clear permission to donate after the quality-based date, though the law suggests that if advertised as such, milk may be sold after the sell-by date.</p>	<ul style="list-style-type: none"> Establish guidelines expressly allowing the donation or the freezing of food after a quality-based date, and educate businesses about donation. Launch education campaigns and guidance documents that promote consumer awareness and education on the meaning of date labels. Align any updates to date labeling policy with federal guidance.
Food Donation Liability Protections	<p>Moderate Policy</p> <p>Michigan provides liability protection for food donors and food recovery organizations and includes a presumption of good faith.³ Liability protection seems to cover donations that are eventually supplied for a small fee; the law does not mandate that food donations be distributed for free and does allow food donations to be sold for a small fee. However, liability protections do not cover food donated directly to needy individuals.</p>	<ul style="list-style-type: none"> Provide liability protection for certain direct donations made by food businesses directly to those in need. Provide explicit liability protection when donors provide food products past a quality-based date. Issue clarifying guidance addressing the explicit liability protection for donations sold at a low price by distributing nonprofits.
Tax Incentives for Food Rescue	<p>No Policy</p> <p>Michigan provides no additional tax deductions or credits for the donation of food beyond those offered by the federal government.</p>	<ul style="list-style-type: none"> Offer tax incentives that better offset the costs of food donation, including the cost of transporting donated food. Offer a tax credit for donation by farmers.

<p>Organics Processing Infrastructure Permitting</p>	<p>Weak Policy</p> <p>Michigan does not have separate regulations for food scrap composting. It does not require permitting for yard trimmings composting facilities, though it requires registration with the Michigan Department of Environment, Great Lakes, and Energy (MI EGLE) for facilities processing more than 200 cubic yards of such trimmings.⁴ Food scraps can be incorporated at these operations. Registered facilities must seek MI EGLE permission to process more than 5,000 cubic yards per year, likely affecting the economic viability of some composting operations. Michigan regulations do not reference anaerobic digestion.</p>	<ul style="list-style-type: none"> ■ Create regulatory tier(s) for food scrap composting. ■ Increase the threshold volume of composted material that can be processed to reduce barriers to entry for composting source-separated food waste. ■ Develop a separate permitting pathway for anaerobic digestion of source-separated food waste that includes, where applicable, requirements similar to those imposed on composting source-separated food waste. ■ Bolster the market for finished compost by enacting procurement requirements for commercial developers and/or government agencies (e.g., mandatory consideration of a bid for use of compost).
<p>Food Safety Policies for Share Tables</p>	<p>Strong Policy</p> <p>Michigan developed an administrative memo to convey best practices for the rescue of surplus food in schools, which include food safety requirements for share tables in school cafeterias.⁵</p>	<ul style="list-style-type: none"> ■ Promote opportunities for schools to increase food rescue through share tables and other methods.
<p>Food Systems Plans, Goals, and Targets</p>	<p>Weak Policy</p> <p>In 2010 Michigan State University developed a Good Food Charter, with a 10-year plan for Michigan's food and agriculture system, but no other food systems plans exist.⁶ Further, the Good Food Charter addresses food waste only as a part of the overall food system and does not mention specifics as to reduction methods. It does minimally reference continued support for the Michigan Agricultural Surplus System (MASS) grant, which enables the purchase of certain excess produce from Michigan farmers.⁷</p>	<ul style="list-style-type: none"> ■ Develop a comprehensive statewide food systems plan, with clear goals and targets to build a local, sustainable food system and support local farmers. This plan should include considerations for food waste reduction. ■ Establish a statewide framework and support system to achieve these targets. ■ Regional plans provide the opportunity to set goals and targets for supporting food systems and promoting food waste reduction strategies.
<p>Plans Targeting Solid Waste</p>	<p>Moderate Policy</p> <p>Michigan does not have a current solid waste management plan. However, its Solid Waste Policy outlines a statewide recycling goal and identifies composting and waste reduction as strategies to support this goal.⁸ Michigan also authorized a Solid Waste and Sustainability Advisory Panel to provide recommendations for composting, recycling, and reuse.⁹</p>	<ul style="list-style-type: none"> ■ Develop a statewide solid waste management plan and provide specific waste diversion goals and recommendations for reduction of food waste through prevention, donation, rescue, and/or processing through composting or anaerobic digestion. ■ Municipalities can modify county solid waste management plans to incorporate a stronger focus on food waste reduction, including by establishing a timeline for achieving diversion goals.

<p>Climate Action Goals</p>	<p>Weak Policy</p> <p>There is no legislative framework for climate action goals. Governor Gretchen Whitmer signed an executive order entering Michigan into the U.S. Climate Alliance and another that commits the state to pursuing greenhouse gas emissions reductions and establishing a goal of statewide carbon neutrality by 2050.¹⁰ However, neither of these executive orders specifically addresses food waste reduction strategies.</p>	<ul style="list-style-type: none"> ■ Pass legislation to establish climate action goals that specifically address food waste reduction as it pertains to climate goals. ■ Task specific departments with actionable next steps for advancing emissions reductions in the context of reducing food waste. ■ Create specific recommendations for reducing food waste through climate action planning, and assign to specific departments actionable next steps for moving policy forward. ■ Local climate action goals and plans can be passed to draw the connection between emission reductions and reducing food waste and to further local efforts.
<p>Grants and Incentive Programs Related to Food Waste Reduction</p>	<p>Moderate Policy</p> <p>Michigan provides several grants and other resources to support diversion initiatives at the local level, including a matching grant program in 2021 that allocated \$8.5 million to increasing the statewide recycling rate, bolstering recycling markets, and supporting recycling supply chains.¹¹</p> <p>There are currently no technical assistance or incentive programs in place.</p>	<ul style="list-style-type: none"> ■ Establish a free technical assistance program to help businesses divert organics from the waste stream. Local technical assistance programs can also support these efforts. ■ Create dedicated grant programs to fund initiatives that explicitly focus on food waste reduction. ■ Continue to fund existing grant programs that advance food waste management activity. ■ As a near-term, incremental option, consider implementing an incentive program to encourage businesses to divert food from the waste stream through donation or other measures. This could come in the form of government recognition, certification, or other encouragement.

Michigan Food Waste Policy Inventory

ORGANICS DISPOSAL BANS AND RECYCLING LAWS

Michigan has a yard waste disposal ban.¹² Other than that, the state does not have any legislation regarding organics disposal bans or waste recycling laws that apply to food waste.

DATE LABELING

In Michigan, milk and milk products, along with other perishable food (including meat but excluding fruits and vegetables), must be labeled with the recommended last day of sale. Nonperishable food does not require a date label but may be labeled with the recommended last day of sale or consumption. Explanatory terms such as “sell by” or “last date of sale” are not required on any food products. Milk, milk products, other perishable food, and nonperishable foods that are date-labeled may not be sold after the label date unless the food is wholesome, sound, and clearly advertised to the final consumer as having passed the label date. Michigan does not prohibit the donation of food past its label date.

Citation	Summary & Key Elements	Source
<p>Mich. Comp. Laws Ann. § 289.8107</p>	<p>Title: Definitions; Prepackaged Perishable Food; Date; Prohibited Sales; Advertisement of Food Sold After Date; Alteration of Date Prohibited; Calculation of Date; Exceptions</p> <p>Summary: Prepackaged perishable food (which includes meat) must be labeled with the recommended last day of sale. Prepackaged nonperishable food does not require a label date. Prepackaged perishable foods and nonperishable foods that are date-labeled may not be sold after the label date unless the food is wholesome and sound and is clearly identified as having passed the date</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ <i>Date</i> is defined as the recommended last day of sale for perishable food and the recommended last day of sale or consumption for nonperishable food. ■ Prepackaged perishable food may not be sold unless there is a last day of sale label on the package. ■ Prepackaged nonperishable food may be sold with or without a date label on the package. ■ The date for prepackaged perishable food may be displayed with or without “explanatory terms,” which include “sell by,” “sell before,” “last date of sale,” “recommended last date of sale,” or “recommended sale date.” ■ Meat that has been removed from a federally inspected retail package may not be sold after the sell-by date. ■ Nonperishable food or prepackaged perishable foods cannot be sold after the sell by date unless the food is wholesome, sound, and clearly identified as having passed the date. 	<p>http://www.legislature.mi.gov/(S(rh3xauf-blf2eleafkcighbtb))/mileg.aspx?page=getObject&objectname=mcl-289-8107</p>
<p>Mich. Comp. Laws Ann. § 288.539</p>	<p>Title: Sell-By Date; Requirements</p> <p>Summary: Milk and milk products must have a date label for the last day of sale, and sale after this date is not permitted unless clearly advertised to the final consumer in a prominent manner as being beyond the recommended last day of sale.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Each processor and manufacturer of milk and milk products sold in Michigan must have a recommended last day of sale on each container. ■ Milk and milk products may not be sold after the sell-by date unless they are advertised to the consumer in a prominent way as being beyond the recommended last day of sale. ■ Milk and milk products must maintain nutritional levels and must not have a change in flavor before the sell-by date. 	<p>http://www.legislature.mi.gov/(S(unontzhh-kdjbc2b4bcfvpj))/mileg.aspx?page=getObject&objectName=mcl-288-539</p>

FOOD DONATION LIABILITY PROTECTIONS AND TAX INCENTIVES FOR FOOD RESCUE

Michigan offers civil liability protection for food donation. The state does not offer tax incentives for food rescue.

Citation	Summary & Key Elements	Source
<p>Mich. Comp. Laws Ann. § 691.1572</p>	<p>Title: Perishable or Prepared Food Donations to Nonprofit Corporation or Charitable Organizations; Civil Liability; Exceptions to Immunity</p> <p>Summary: This law offers civil liability protection for individuals and organizations that donate food or distribute donated food in good faith.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ An individual, farmer, food producer, processor, distributor, wholesaler, retailer, gleaner, or other person who in good faith donates perishable canned or farm food items or prepared food to a nonprofit or charitable organization for distribution is not liable in any civil action if any illness or disease is contracted by the recipient of the donated food. ■ This immunity does not apply if the illness or disease resulted from the willful, wanton, or reckless acts of the donor, or if the donor had actual or constructive knowledge that the donated food was tainted or contaminated in such a way that would harm the health or well-being of the recipient of the donated food. ■ Donors are not protected if injury resulted from prepared food that was potentially hazardous food at the time of donation and a state law concerning the preparation, transportation, storage, or serving of the prepared food was violated before the food was donated. ■ Donors are not protected if illness or disease resulted from food in hermetically sealed containers that was not prepared by a commercial processor. 	<p>http://www.legislature.mi.gov/(S(imn5iuvvrvmdv3szietcplsp))/mileg.aspx?page=getobject&objectName=mcl-691-1572</p>

ORGANICS PROCESSING INFRASTRUCTURE PERMITTING

MI EGLE’s Solid Waste Section regulates composting facilities in the state. The existing regulation, which became effective in 2008, does not require a permit but does require registration, and it covers only “yard clippings” composting facilities that process more than 200 cubic yards (cy) of material (including what is being composted and finished compost) at any one time. These facilities are allowed to take in “site separated” food waste under their registration designation. The regulation uses the term *garbage* for food waste, defined as “rejected food wastes including waste accumulation of animal, fruit, or vegetable matter used or intended for food or that attends the preparation, use, cooking, dealing in, or storing of meat, fish, fowl, fruit, or vegetable matter.” MI EGLE has been working on revisions to its organics recycling regulations for several years, including by circulating drafts for public comment. The proposed revised rule was introduced to the legislature in 2020, but due to COVID-19, no action was taken. MI EGLE reintroduced it in the 2021 legislative session and hopes to see it passed by the end of the year. Specifics on the proposed revisions were not provided but are likely to include a tiered approach for food waste composting regulations. On-farm anaerobic digestion is regulated by Michigan’s Water Resources Division. The Solid Waste Section does not regulate food waste digestion; however, its proposed revisions would cover facilities not located on farms or at wastewater treatment plants. Finally, the registration limits the amount of yard clippings that can be processed to less than 5,000 cy/acre at one time; to increase that amount, facilities must apply to EGLE and prove the operators are able to compost an increased volume without negative impact to public health and the environment. This would apply to composting facilities that also accept site-separated “garbage.”

Michigan prohibits the exposure of swine to garbage and the use of garbage, offal, or carcasses as feed for swine. In addition, any dairy plant by-products used for feeding purposes for farm animals must be pasteurized.

Citation	Summary & Key Elements	Source
<p>Mich. Comp. Laws Ann. §§ 324.11501 et. seq.</p>	<p>Title: Natural Resources and Environmental Protection Act, Act 451 of 1994, Part 115, Solid Waste Management</p> <p>Summary: Sec. 324.11521 of rule—“Yard clippings; management; means; temporary accumulation; requirements; composting on farm; qualification as registered composting facility; site at which yard clippings are managed”—is Michigan’s only composting regulation. Food waste is not explicitly covered.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Any site processing more than 200 cubic yards (cy) of yard clippings (including what is being processed and finished compost) at any one time must register with MI EGLE. This includes small-scale operations that compost food scraps with yard clippings. ■ Current regulations do not require any permits or approval from EGLE for the composting of site- or source-separated compostable material. Source-separated material includes wood, paper products, garbage (i.e., food waste), yard clippings, or any other material approved by EGLE that is separated at the source of generation for the purpose of conversion into raw materials or new products. Compost is considered a “new product.” Definitions in the solid waste rule that reference food waste are: <ul style="list-style-type: none"> “Food processing residuals.” This covers residuals of fruits, vegetables, aquatic plants, or field crops; otherwise unusable parts of fruits, vegetables, aquatic plants, or field crops from the processing thereof; and otherwise unusable food products intended for human or animal consumption that do not meet size, quality, or other product specifications. “Garbage.” This refers to rejected food wastes including waste accumulation of animal, fruit, or vegetable matter used or intended for food or resulting from the preparation, use, cooking, dealing in, or storing of meat, fish, fowl, fruit, or vegetable matter. ■ Compostable site- or source-separated material can be composted, as long as it is done in compliance with Part 55, Air Pollution Control, Part 115, and Part 31, Water Resources Protection, of the NREPA. ■ Registered facilities cannot have more than 5,000 cubic yards of yard clippings and other compostable material, compost, and residuals present on any acre of the property, unless prior approval has been obtained from EGLE. To process more than 5,000 cy/acre, an applicant must demonstrate to EGLE that the operator of the facility has sufficient knowledge, training, appropriate site design, and equipment to handle a larger volume. ■ Composting facilities are not subject to the industrial stormwater program overseen by EGLE’s Water Resources Division, but any precipitation that comes into contact with compost piles and any leachate from the compost is considered process wastewater, the disposal of which is regulated by the Water Resources Division. The preferred method of leachate management, and the most cost effective, is to collect and reuse all of the runoff on-site to maintain proper moisture levels of the compost piles. ■ Finished compost must not contain more than 1 percent, by weight, of foreign matter if it is put through a 4-millimeter screen. <p>Additional details are provided in the Plans Targeting Solid Waste table, below.</p>	<p>Natural Resources and Environmental Protection Act: http://legislature.mi.gov/doc.aspx?m-cl-451-1994-11-3-115</p> <p>Composting: http://legislature.mi.gov/doc.aspx?m-cl-324-11521</p> <p>Definitions: http://www.legislature.mi.gov/(S(yncsnfmy-bac5grcjw2xe42uw))/mileg.aspx?page=GetObject&objectname=mcl-324-11503</p> <p>Michigan.gov composting page: https://www.michigan.gov/egle/0,9429,7-135-3312_4123-185537--,00.html</p> <p>Regulatory Roadmap (flow chart) for Yard Clippings Management: https://www.michigan.gov/documents/deq/Visio-Compost_flowchart_web_version_226545_7.pdf</p> <p>FAQs: https://www.michigan.gov/documents/deq/Composting_Facilities_Frequently_Asked_Questions_609493_7.pdf</p>

Citation	Summary & Key Elements	Source
<p>Mich. Admin. Code R 336.1285 (bb)</p>	<p>Title: Department of Environmental Quality, Air Quality Division, Air Pollution Control: Permit to Install Exemptions; Miscellaneous</p> <p>Summary: Composting processes are not required to obtain a permit as long as they control release of odors and particulate matter.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Residential, municipal, commercial, or agricultural composting processes or process equipment are exempt from the state’s air permit requirement. ■ Rule notes that noxious odors generally come from composting operations that are not using good operational practices, such as keeping the pad dry and well drained, maintaining the proper mixture of carbon (leaves/wood chips) to nitrogen (grass clippings/foilage trimmings), and properly turning windrows to maintain aerobic conditions. ■ Facilities that are unable to adequately minimize odors can be cited in violation of R 336.1901, which prohibits emissions of air pollutants that “can cause unreasonable interference with the comfortable enjoyment of life and property.” 	<p>https://ars.apps.lara.state.mi.us/AdminCode/DownloadAdminCodeFile?FileName=R%20336.1201%20to%20R%20336.1299.pdf</p>
<p>Compost Operations: Regulations and Best Management Practices Workshop, State Regulation Overview: Water Resources Division (based on Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended)</p>	<p>Title: Compost Operations: Regulations and Best Management Practices Workshop</p> <p>Summary: Issues related to wastewater discharges from yard clippings composting facilities led the Division of Water Resources to analyze wastewater samples and define when compost wastewater would need to be permitted under stormwater permits, National Pollutant Discharge Elimination System permits, or groundwater discharge permits.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ <i>Compost wastewater</i> is defined as a liquid composed of process water; wash water; and/or leachate that ponds, flows laterally from the base of the compost pile, or collects in an under-drainage system. ■ Compost wastewater could require a: <ul style="list-style-type: none"> □ Stormwater Discharge Permit (either Industrial Stormwater and/or Municipal Separate Storm Sewer System). A Stormwater Discharge Permit would not be required if there are no discharges to surface water. □ NPDES Individual Permit and/or Groundwater Discharge Permit. No permit would be required if wastewater is recycled back into active composting or if wastewater is captured/discharged to sanitary sewer or hauled off site. 	<p>https://www.michigan.gov/documents/deq/Compost_Regs_overview-WRD_477080_7.pdf</p> <p>Guidance Document: https://www.michigan.gov/documents/deq/deq-ess-p2tas-waterguidance-Part31ofNREPA_209536_7.pdf</p> <p>Groundwater: http://www.legislature.mi.gov/(S(da34nkb2v-vxnjtb0eazm2rym))/mileg.aspx?page=GetObject&objectname=mcl-324-3112</p> <p>Surface Water: http://www.legislature.mi.gov/(S(r24qkloypu-z0hmlry5y3dq2n))/mileg.aspx?page=GetObject&objectname=mcl-324-3112</p>
<p>Mich. Comp. Laws Ann. § 287.744</p>	<p>Title: Animal Industry Act; Enforcement of Act Criminal and Civil Actions; Felonies; Penalty; Violation of Act or Rule as Misdemeanor; Costs and Attorney Fees; Powers of Director; Failure to Pay Fine; Civil Action and Penalties; Remedies and Sanctions as Independent and Cumulative Powers of Department</p> <p>Summary: A person shall not expose swine to garbage or feed swine garbage, offal, or carcasses. Except, with express director approval, swine may be fed garbage, offal, or carcasses in the event a disease outbreak necessitates such acts.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Swine shall be quarantined by the director of agriculture if exposed to, in contact with, or fed garbage, offal, or carcasses. ■ <i>Garbage</i> means any animal-origin products, including those of poultry and fish origin, or other animal material resulting from the handling, processing, preparation, cooking, or consumption of foods. Garbage includes, but is not limited to, any refuse of any type that has been associated with any such material at any time during the handling, preparation, cooking, or consumption of food. Garbage does not include rendered products or manure. 	<p>http://www.legislature.mi.gov/(S(qjme-5c2raymvgqlolj0mkq0x))/mileg.aspx?page=GetObject&objectname=mcl-287-744</p>

Citation	Summary & Key Elements	Source
Mich. Comp. Laws Ann. § 288.538	<p>Title: Pasteurized Milk and Milk Products for Sale; Requirements</p> <p>Summary: All dairy plant by-products used for feeding purposes for farm animals shall be pasteurized.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Such products can be pasteurized or derived from pasteurized products when specified by the director of agriculture. 	http://www.legislature.mi.gov/(S(vdlaOut-b03xeur4nlowcgq5))/mileg.aspx?page=Get-MCLDocument&objectname=mcl-288-538

FOOD SAFETY POLICIES FOR SHARE TABLES

Michigan’s Department of Education (MDE) encourages, but does not require, the use of share tables in schools. MDE developed a Standard Operating Procedure for share tables but encourages localities to contact their local health department for guidance.

Citation	Summary & Key Elements	Source
Michigan Department of Education: Food Service, Administrative Memo No. 7 School Year 2019–2020, March 3, 2020.	<p>Title: Updated Guidance Regarding Share Tables in School Food Programs: U.S. Department of Agriculture (USDA) Guidelines and Application of the Food Code</p> <p>Summary: MDE developed an administrative memo to convey best practices for school districts when implementing a share table.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Establishes best practices for share tables and encourages school districts to check with local health departments to determine relevant food safety rules. ■ Includes a sample Hazard Analysis and Critical Control Point–Based Standard Operating Procedure (SOP) modeled after the USDA’s SOP. ■ Food on share tables can be either directly shared or re-served. <ul style="list-style-type: none"> □ If the food is directly shared, it is left on the share table during the meal service. Any temperature controlled for safety (TCS) food left on the share table is discarded at the end of the meal, and food code provisions are not applicable. Because TCS foods are discarded at the end of the meal period, no temperature control is required. □ For re-service of any foods (including TCS foods), the food on the share table must be maintained at proper temperatures while on the share table. The local health department must grant a variance for re-service of TCS foods. 	https://www.michigan.gov/documents/mde/Admin_Memo_No_7_682598_7.pdf

FOOD SYSTEMS PLANS, GOALS, AND TARGETS

Universities in Michigan have led most of the efforts to develop statewide or regional food systems plans. Michigan State University developed a Good Food Charter, which creates a 10-year plan for Michigan’s food and agriculture system. Although no other state or regional food systems plans exist, the Upper Peninsula Food Exchange (UPFE), a food hub led by the Marquette Food Co-op in conjunction with organizations across the Upper Peninsula, has worked with communities across the Upper Peninsula to provide education and draft guidance on community food systems.¹³ The UPFE created a sample master plan for community food systems and a community food systems guide to help local and regional governments develop their food systems plans.¹⁴ UPFE’s work led to Marquette County developing a Local Food Supply Plan in 2013, which was later adopted as a chapter of the county’s comprehensive plan.¹⁵ Similarly, the City of East Lansing’s Master Plan encourages the consideration of food systems priorities in planning to encourage healthy lifestyles for all.¹⁶

The East Michigan Council of Governments, comprising 14 counties in east central Michigan, received funding in 2012 from the USDA to prepare a Regional Food Systems Assessment and Plan.¹⁷

Citation	Summary & Key Elements	Source
Michigan State University, the Food Bank Council of Michigan, and the Michigan Food Policy Council, Michigan Good Food Charter (2010)	<p>Title: Michigan Good Food Charter</p> <p>Summary: The charter develops a 10-year plan for Michigan's food and agriculture system to support equity and sustainability in local communities.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Sets 25 policy priorities for Michigan to achieve by 2020, including: <ul style="list-style-type: none"> □ 20 percent of food products bought in Michigan will be produced in Michigan; and □ 80 percent of Michigan residents will have easy access to affordable, fresh, healthy food. ■ The strategies focus on creating new economic opportunities, bringing food to where people live, and cultivating a culture that values good food. ■ In 2018 the organizations published a summary detailing progress on some of the charter goals.¹⁸ Similar summaries were published in 2014 and 2010.¹⁹ ■ The organizations have also hosted summits to advance the goals and priorities of the Good Food Charter and share progress from across the state.²⁰ 	https://www.canr.msu.edu/michiganfood/uploads/files/charter.pdf
Michigan Technological University, Western Upper Peninsula Food Systems Council, 2019/2019 Annual Report (2020)	<p>Title: Western Upper Peninsula Food Systems Council, 2019/2019 Annual Report</p> <p>Summary: Michigan Technological University led the development of this first annual report, which summarizes information learned during Food System Collaborative meetings and resulting objectives for the Western Upper Peninsula food system.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ The Western Upper Peninsula Food Systems Council's first steps include assessing community food systems and food sovereignty by the end of 2021 and conducting a food hub feasibility study by the end of 2022. 	https://static1.squarespace.com/static/5be19cae3c3a533ee914cf15/t/5e85f694f814d443931cdc62/1585837730873/annual+reportfinal.pdf

PLANS TARGETING SOLID WASTE

Michigan requires its 83 counties to develop and maintain solid waste management plans and is currently in the process of expanding the scope of these plans to highlight sustainable materials management principles instead of focusing solely on solid waste management. Several reports and policies outline the state's goals for reaching a 30 percent recycling rate and 50 percent utilization rate by 2025.

Citation	Summary & Key Elements	Source
Michigan Solid Waste Policy (2017)	<p>Title: Michigan Solid Waste Policy</p> <p>Summary: Creates a framework for residents, businesses, organizations, local government, and institutions to view waste as a resource. It highlights the importance of considering the economy, environment, and quality of life in making solid waste management decisions.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Identifies a goal of utilizing 50 percent and recycling 30 percent of Michigan's municipal solid waste by 2025 and ensuring easy access to residential recycling programs by 2020. ■ Identifies composting and waste reduction as strategies to support the aforementioned goals. ■ Notes a need for materials management planning to provide right-sized disposal capacity. ■ States that Michigan "should develop and promote incentive systems" such as technical assistance grants, program development matching grants, market development matching grants, and other incentives. 	https://www.michigan.gov/documents/deq/deq-wmrdp-SolidWastePolicy_FINAL_SWSAP_GRC_608848_7.pdf

Citation	Summary & Key Elements	Source
<p>Governor's Recycling Council Report and Recommendations (2017)</p>	<p>Title: Governor's Recycling Council Report and Recommendations</p> <p>Summary: Provides a series of recommendations from the Governor's Recycling Council and Michigan Department of Environmental Quality to double the state's recycling rate.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Encourages statewide education for increasing recycling and the development of a universal comprehensive recycling program for the state. ■ Encourages a Michigan Recycling Market Development Initiative. ■ Recommends the creation of a Michigan Recycling Improvement Fund to support recycling initiatives. ■ Suggests a process for creating clear performance goals. ■ Provides 30 specific recommendations to improve the recycling rate. ■ Outlines the importance of a materials management approach, addressing composting opportunities as well. ■ Notes an opportunity to increase finished compost use in state construction projects. ■ Encourages technical support to outline a strategy that encourages development of private and public organics processing infrastructure. 	<p>https://www.michigan.gov/documents/deq/deq-wmrdp-GRC_Report_FINAL_555408_7.pdf</p>
<p>Michigan Solid Waste and Sustainability Advisory Panel Report (2017)</p>	<p>Title: Michigan Solid Waste and Sustainability Advisory Panel Report</p> <p>Summary: Provides recommendations for amendments to Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act to focus on materials management planning, providing oversight of composting and materials recovery facilities, and ensuring funding for state and local implementation of requirements related to solid waste.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Solid waste planning should be considered "materials management planning." Michigan should rely less on disposal and more on broader materials management to support increased recycling and reuse consistent with sustainable management. ■ Report proposes changes to authorizations for management of solid waste. <p>Report suggests that compost provisions under Part 115 be amended to increase oversight over compost facilities.</p>	<p>https://www.michigan.gov/documents/deq/deq-wmrdp-SWSAP_Report_FINAL_555407_7.pdf</p>

Citation	Summary & Key Elements	Source
Mich. Comp. Laws Ann. §§ 324.11501 et. seq.	<p>Title: Natural Resources and Environmental Protection Act, Act 451 of 1994, Part 115, Solid Waste Management</p> <p>Summary: These sections outline rules for counties or regional solid waste management planning agencies to conduct solid waste management planning as well as guidelines on the handling of solid waste.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Requires counties or regional planning agencies to develop a solid waste management plan that goes into effect by January 5, 1984. ■ Requires that by September 11, 1979, rules must be formulated for development of solid waste management plans. Rules address items such as benchmarking current practices, review of potential management options (including resource recovery systems and resource conservation), community engagement, enforcement, and a project timeline. ■ Allows the incorporation of reduction, reuse, and composting as strategies for decreasing the volume of solid waste when projecting community disposal requirements. ■ Stipulates that a state solid waste management plan must include both the state plan and all county plans approved or prepared by the Michigan Department of Environment, Great Lakes, and Energy ■ Establishes a grant program to aid county or regional solid waste management planning agencies to fulfill planning duties as required by the act. ■ Additional details are provided in the Organics Processing and Infrastructure Permitting table, below. 	http://www.legislature.mi.gov/documents/mcl/pdf/mcl-451-1994-ii-3-115.pdf

CLIMATE ACTION GOALS

In 2020, Governor Whitmer directed the newly created Office of Climate and Energy to develop a Michigan Healthy Climate Plan, with oversight from an also newly established Council on Climate Solutions. A draft of this plan is due in the fall of 2021, with a final draft mandated for approval by the end of the year. Michigan is part of the U.S. Climate Alliance and is committed to being carbon neutral by 2050. Specific plans to reduce emissions have not been released, but the state’s goals present a very good opportunity for promoting food waste reduction.

Citation	Summary & Key Elements	Source
Executive Directive 2020-182	<p>Title: Council on Climate Solutions</p> <p>Summary: Establishes a Council on Climate Solutions to oversee development of the Michigan Healthy Climate Plan.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Creates the council as an advisory body to the governor and the Department of Environment, Great Lakes, and Energy. ■ Charges the council with oversight of the Michigan Healthy Climate Plan (see below), including identifying and recommending opportunities and solutions to address the disproportionate impacts on certain communities across the state. ■ Requires the council to provide regular reports to the governor. 	https://www.michigan.gov/whitmer/0,9309,7-387-90499_90705-540277--,00.html

Citation	Summary & Key Elements	Source
<p>Executive Directive 2020-10, September 23, 2020</p>	<p>Title: Building a Carbon-Neutral Michigan</p> <p>Summary: Directs MI EGLE’s Office of Climate and Energy to create a Michigan Healthy Climate Plan to reduce greenhouse gas emissions and shift to carbon neutrality.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Establishes a goal of statewide carbon neutrality by 2050 and maintenance of net negative greenhouse gas emissions following this date. ■ Requires the Office of Climate and Energy to develop, no later than December 31, 2021, a Healthy Climate Plan for the state to achieve these goals. ■ Requires MI EGLE to submit annual reports on progress beginning December 31, 2022. ■ Directs the Department of Technology, Management and Budget to evaluate cost and energy efficiency when renovating state-owned buildings, with a goal of new and renovated state buildings being carbon neutral by 2040, and existing facilities reducing energy use by 40 percent by 2040. 	<p>https://www.michigan.gov/whitmer/0,9309,7-387-90499_90704-540278--,00.html</p>
<p>Executive Directive 2019-12, February 4, 2019</p>	<p>Title: Responding to Climate Change</p> <p>Summary: Enters Michigan into the U.S. Climate Alliance, which commits the state to pursuing a 26–28 percent reduction in greenhouse gas emissions, relative to 2005 levels, by 2025.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Commits Michigan to tracking and reporting progress to the global community. ■ Accelerates new and existing policies to reduce carbon pollution and promote clean energy. 	<p>https://www.michigan.gov/whitmer/0,9309,7-387-90499_90704-488740--,00.html</p>
<p>Executive Directive 2019-6, February 20, 2019</p>	<p>Title: Executive Reorganization</p> <p>Summary: Reorganizes state agencies with a focus on improving the quality of Michigan’s air, land, and water; protecting public health; and encouraging the use of clean energy.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Changes name of the Department of Environmental Quality to the Department of Environment, Great Lakes, and Energy. ■ Creates an Interagency Environmental Justice Response Team. ■ Establishes an Office of Climate and Energy to coordinate the state’s climate response and mitigation efforts. 	<p>https://www.michigan.gov/whitmer/0,9309,7-387-90499_90705-490039--,00.html</p>

GRANTS AND INCENTIVE PROGRAMS RELATED TO ADVANCING FOOD WASTE REDUCTION

The state has developed several grant programs and other resources, including a Guide: Operational and Funding Options for Municipal Recycling Programs, to support diversion initiatives at the local level.²¹ Public Act No. 69 of 2005 amended Mich. Comp. Laws Ann. § 124.508(a) to provide a mechanism by which local municipalities can assess a fee to support recycling and composting efforts. Additionally, the Department of Agriculture and Rural Development maintains a list of grant and funding opportunities, many of which do not directly reference composting programs but may be applied to food systems.²²

Citation	Summary & Key Elements	Source
<p>Recycling and Organics Infrastructure Grant Program, Michigan Department of Environment, Great Lakes, and Energy</p>	<p>Title: Recycling Infrastructure Grants</p> <p>Summary: A matching grant program to support efforts to increase the statewide recycling rate.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ With applications open through August 18, 2021, this grant offers funding for projects aimed to increase the state's recycling rate, improve collection and processing capacity or other infrastructure for food waste, and increase recycling or food waste composting participation rates. ■ Eligible applicants include businesses, nonprofit organizations, tribal governments, schools, local health departments, regional planning agencies, municipalities, municipal solid waste authorities, and resource recovery authorities located in Michigan. ■ The maximum award per project is \$1 million. ■ Grantees must provide matching funds equaling 20 percent of the total project budget. 	<p>https://www.michigan.gov/documents/egle/MMD-Sustainability-FY2021_Recycling_Grant_RFP_722389_7.pdf</p>
<p>Recycling Market Development Grant Program, Michigan Department of Environment, Great Lakes, and Energy</p>	<p>Title: Recycling Market Development Grants</p> <p>Summary: A matching grant program to support statewide recycling markets and the use of recycled material.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Funding is available for projects that support research and testing, marketing, data collection and analysis, processing equipment, product commercialization and use, and partnership projects. ■ Eligible applicants include businesses, nonprofit organizations, tribal governments, schools, local health departments, regional planning agencies, municipalities, municipal solid waste authorities, and resource recovery authorities located in Michigan. ■ Individual award maximums vary by category, not to exceed \$300,000. ■ A match of at least 20 percent of the project budget is required for most projects, and a 50 percent match is required for several categories. ■ An additional Micro Project grant category is available for funding requests up to \$10,000, with no matching funds required. ■ Preference is given to a variety of categories, including organics. 	<p>https://www.michigan.gov/documents/egle/MMD-Sustainability-FY2021_Recycling_Grant_RFP_722389_7.pdf</p>

Citation	Summary & Key Elements	Source
<p>NextCycle Michigan</p>	<p>Summary: This initiative was developed in partnership with private and nonprofit entities; the goal is to incubate ideas and foster development of the state's recycled material supply chain and end markets.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Supports recycling and recovery efforts in Michigan. ■ Challenge participants compete for start-up funds while developing a road map for their project. Awardees receive resources and technical support. ■ Innovation Challenge addresses six tracks, one of which is "Foods, Liquids, & Organic Waste Systems." ■ Funding is provided through the Renew Michigan Fund in partnership with private and nonprofit investments. 	<p>https://www.nextcyclemichigan.com/</p>
<p>Public Act No. 69 of 2005/ Mich. Comp. Laws Ann. § 124.508(a)</p>	<p>Title: Enrolled Senate Bill No. 79 (2005).</p> <p>Summary: Municipalities can work with local government units to establish a special assessment of up to \$25 per year per household (or, if approved by voters, up to \$50 per year) for recycling, composting, and/or household hazardous waste projects. Voters can also approve a surcharge for commercial businesses.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Amends Mich. Comp. Laws Ann. § 124.508(a) to impose surcharge on households for waste reduction programs and collection of consumer source-separated materials for recycling or composting. 	<p>https://www.legislature.mi.gov/(S(ixstjmpzu2jtm0Isbflw2yd))/mileg.aspx?page=getObject&objectName=mcl-124-508a</p> <p>Guide: Use of Special Assessments to Fund Recycling Services & Facilities: https://www.michigan.gov/documents/deq/ResidentialRecycling-SpecialAssessments_487888_7.pdf</p>
<p>Michigan Rural Development Fund Grants, Department of Agriculture and Rural Development</p>	<p>Title: Michigan Rural Development Fund Grants</p> <p>Summary: The Michigan Department of Agriculture and Rural Development offers funding to support land-based industries and infrastructure that benefits rural communities.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ Supported industries include food and agriculture, forestry, and tourism, among others. ■ Grant funds can be applied to worker training, expansion and sustainability efforts, and infrastructure for energy, transportation, communication, water, and wastewater. ■ While the grant application does not directly reference organics management projects, it does not directly prohibit these either. 	<p>https://www.michigan.gov/mda/rd/0,4610,7-125-1570_51684_78392---,00.html</p>
<p>Reducing/Diverting Wasted Food 2016, Michigan Department of Environment, Great Lakes, and Energy</p>	<p>Title: Reducing/Diverting Wasted Food 2016</p> <p>Summary: In 2016 funding was awarded through Community Pollution Prevention Grants to four projects that promoted food waste reduction and diversion.</p> <p>Key Elements:</p> <ul style="list-style-type: none"> ■ The Michigan Department of Environment, Great Lakes, and Energy identified food waste as a significant waste stream with high potential for reduction. ■ It does not appear that this grant has been offered since. 	<p>https://www.michigan.gov/egle/0,9429,7-135-70153_70155_3585_57765_62565-388572--,00.html</p>

Food Waste Reduction Policy Gap Analysis Rubric

Organics Disposal Bans and Recycling Laws	Date Labeling	Food Donation Liability Protections	Tax Incentives for Food Rescue	Organics Processing Infrastructure Permitting	Food Safety Policies for Share Tables	Food Systems Plans, Goals, and Targets	Plans Targeting Solid Waste	Climate Action Goals	Grants and Incentive Programs Related to Food Waste Reduction
NO POLICY									
No organics disposal bans or mandatory organics recycling laws for food waste have been enacted, and there is no financial incentive structure to encourage food donation or food waste diversion.	There are no laws pertaining to date labels on food products.	There is no state-based liability protection for donated food.	There are no tax incentives for food donation.	<p>Solid waste regulations have no separate streamlined tier for processing source-separated organics. That is, food waste composting is considered solid waste composting, and this presents a barrier to entry for small composters.</p> <p>There is no acknowledgment of anaerobic digestion of source-separated organics from the municipal solid waste stream.</p> <p>No exemption tier exists for small quantities of source-separated food waste.</p>	N/A	No regional or statewide food systems plans exist. Some local plans may exist.	No solid waste management plan or organics management plan exists at the state level.	No climate action goals exist.	No state plans, programs, or policies allocate funding or incentives to support food waste reduction.

Organics Disposal Bans and Recycling Laws	Date Labeling	Food Donation Liability Protections	Tax Incentives for Food Rescue	Organics Processing Infrastructure Permitting	Food Safety Policies for Share Tables	Food Systems Plans, Goals, and Targets	Plans Targeting Solid Waste	Climate Action Goals	Grants and Incentive Programs Related to Food Waste Reduction
WEAK POLICY									
<p>Organics disposal bans or mandatory organics recycling laws have been enacted but are ineffective due to exemptions, limited scope, and/or lack of guidance.</p>	<p>The state requires date labels for certain foods and prohibits or limits the sale or donation of food after its label date.</p>	<p>State-based liability protections for food donation exist but are no broader than the federal-level protections or cover either food donors or food rescue organizations, but not both.</p>	<p>N/A</p>	<p>There is a regulatory tier that includes source-separated organics, but at least two of the following are true:</p> <ul style="list-style-type: none"> ■ Requirements for composting source-separated organics are the same as those for composting mixed solid waste, creating significant barriers to opening a facility. ■ Quantity or acreage limitations for source-separated organics tier(s) negatively impact economic viability of operation. ■ Regulations include language about anaerobic digestion of source-separated organics but are vague or have no language addressing what is allowed. 	<p>Share tables are allowed, but the state provides no resources or guidance on food donation safety, OR the state's share table rules are more restrictive than federal guidance.</p>	<p>Some regional food systems plans exist, but they do not have the support of the state and do not adequately consider food waste reduction in food systems planning.</p>	<p>Solid waste management plans exist but are out of date (more than 10 years old) and do not highlight food waste as a diversion opportunity (via prevention, rescue, donation, and/or processing through composting or anaerobic digestion).</p>	<p>Climate action goals exist, but one of the following is true:</p> <ul style="list-style-type: none"> ■ Goals are in the form of executive orders, with no legislative framework. ■ There has been limited legislative action but no real framework or actionable next steps to achieve targets. 	<p>Grants, incentives, or funds for food waste reduction are available, but more than one of the following is true:</p> <ul style="list-style-type: none"> ■ Funding is not explicitly allocated for food waste reduction work as opposed to other diversion strategies. ■ Funding opportunities are not made known to or accessible to relevant applicants. ■ Available funding is unsustainable or insufficient to support desired activities (includes the issuance of one-time grants but does not include funding on pause due to COVID-19). ■ No technical assistance is available to food service waste generators to support food waste reduction efforts.

Organics Disposal Bans and Recycling Laws	Date Labeling	Food Donation Liability Protections	Tax Incentives for Food Rescue	Organics Processing Infrastructure Permitting	Food Safety Policies for Share Tables	Food Systems Plans, Goals, and Targets	Plans Targeting Solid Waste	Climate Action Goals	Grants and Incentive Programs Related to Food Waste Reduction
MODERATE POLICY									
Organics disposal bans or mandatory recycling laws are imposed on select commercial generators, with few exemptions.	The state requires date labels for certain foods but does not prohibit or limit the sale or donation of food after its label date.	State-based liability protections cover donations directly to individuals or donations that are supplied for a small fee, or are otherwise slightly more expansive than the federal-level protections.	The state offers a tax incentive for donating food, but the incentive does not fully offset the costs associated with donation, including transportation.	There is a regulatory tier that includes source-separated organics, and the state may have committed to market development for recycled organic materials, but one of the following is true: <ul style="list-style-type: none"> ■ Requirements for composting source-separated organics are the same as those for composting mixed solid waste, creating significant barriers to opening a facility. ■ Quantity or acreage limitations for source-separated organics tier(s) negatively impact economic viability of operation. ■ Regulations include language about anaerobic digestion of source-separated organics but are vague or have no language addressing what is allowed. 	Share tables are allowed, and the state provides share table guidance, though that guidance is limited.	Robust regional food systems plans or state food systems plans exist, but one of the following is true: <ul style="list-style-type: none"> ■ Framework or support to achieve targets is limited. ■ There is no coordination with other regional food systems plans (if no state plan exists). ■ Plans' consideration of food waste reduction is inadequate. 	Solid waste management plans and/or organics management plans exist and highlight food waste as a diversion opportunity (via prevention, rescue, donation, and/or processing through composting or anaerobic digestion) but are out of date (more than 10 years old) or have limitations.	Climate action goals exist, and one of the following is true: <ul style="list-style-type: none"> ■ Legislated climate action planning sets forth recommendations for reducing food waste. ■ Specific departments have been tasked with actionable next steps for moving policy forward. 	Grants, incentives, or funds for food waste reduction are available, and one of the following is true: <ul style="list-style-type: none"> ■ Funding is not explicitly allocated for food waste reduction work as opposed to other diversion strategies. ■ Available funding is unsustainable or insufficient to support desired activities. ■ No technical assistance is available to food service waste generators to support food waste reduction efforts.

Organics Disposal Bans and Recycling Laws	Date Labeling	Food Donation Liability Protections	Tax Incentives for Food Rescue	Organics Processing Infrastructure Permitting	Food Safety Policies for Share Tables	Food Systems Plans, Goals, and Targets	Plans Targeting Solid Waste	Climate Action Goals	Grants and Incentive Programs Related to Food Waste Reduction
STRONG POLICY									
<p>Organics disposal bans or mandatory recycling laws for food waste have been enacted and are enforced for all commercial generators (and potentially for individuals at the household level).</p>	<p>The state maintains a standardized, mandatory date labeling policy that clearly differentiates between quality-based and safety-based labels; the state does not prohibit or limit the sale or donation of food after its label date; and the state has issued clear permission to donate after the quality-based date.</p>	<p>State-based liability protections are more expansive than the Bill Emerson Good Samaritan Food Donation Act and apply to donations directly to individuals as well as donations that are supplied to the final consumer for a small fee.</p>	<p>The state offers tax deductions or tax credits for donating food that offset the costs associated with donation, including transportation.</p>	<p>The state has a regulatory tier that includes source-separated organics and has committed to market development for recycled organic materials, and all of the following are true:</p> <ul style="list-style-type: none"> ■ Policy reduces barriers to entry for composting source-separated organics, such as through simplified permitting for the addition of food scraps at existing yard trimmings composting facilities or via exemption from permitting for small-scale and/or community composting operations. ■ Restrictions imposed on facility design and operation are in sync with best management practices for composting of source-separated organics. ■ There is a separate permitting pathway in solid waste regulations for anaerobic digestion of source-separated food waste that includes, where applicable, requirements similar to those imposed on composting source separated food waste—for example, contaminant limits on digestate that are similar to limits imposed on compost. 	<p>Share tables are allowed and encouraged, and the state provides state-specific guidelines or instructions about food safety as it relates to donation.</p>	<p>The state has developed comprehensive, statewide food systems plans, and both of the following are true:</p> <ul style="list-style-type: none"> ■ There is a robust framework or support to achieve clear goals and targets. ■ Reduction of food loss and waste is a major component of food systems plans. 	<p>Solid waste management plan, zero waste plan, or organics management plan is kept current, and it outlines waste diversion goals and recommendations for diversion, including reduction of food waste (via prevention, rescue, donation, and/or processing through composting or anaerobic digestion).</p>	<p>Climate action goals exist, and both of the following are true:</p> <ul style="list-style-type: none"> ■ Legislated climate action planning sets forth recommendations for reducing food waste. ■ Specific departments have been tasked with actionable next steps for moving policy forward. 	<p>Grants, incentives, or funds for food waste reduction are available, and all of the following are true:</p> <ul style="list-style-type: none"> ■ Funding is explicitly allocated for food waste reduction work as opposed to other diversion strategies. ■ Available funding is sustainable and sufficient to support desired activities. ■ Free technical assistance is available to food service waste generators to support food waste reduction efforts.

ENDNOTES

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- 5 Michigan Department of Education, “Food Service,” Administrative Memo No. 7, March 2020, https://www.michigan.gov/documents/mde/Admin_Memo_No_7_682598_7.pdf.
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